

Listing of Claims:

1-49. (Cancelled)

50. (Currently Amended) A method for forming an image by a scanning charged particle apparatus, comprising steps of:

~~focusing forming~~ a plurality of two dimensional images each at ~~a~~ different focus ~~height~~ points by detecting particles emitted from a sample using a scanning charged particle beam;

~~evaluating calculating~~ a focus evaluation ~~values~~ ~~value~~ of each pixel on ~~each~~ of the two dimensional images;

~~for each of a plurality of different image points,~~ selecting ~~a~~ ~~the~~ pixel ~~having~~ having a larger focus evaluation ~~values~~ ~~value~~ than at least one other pixel ~~from among pixels~~ at same coordinates of the two dimensional images; and

~~synthesizing the selected pixels for each of the plurality of different image points,~~ two dimensionally ~~into a composite image for forming the image of a scanning range of the charged particle beam.~~

51. (Currently Amended) A charged particle beam apparatus comprising:

a charged particle source;

a scanning deflector for scanning a charged particle beam emitted from the charged particle source on a sample;

an objective lens for adjusting a focus of the charged particle beam;

a detector for detecting particles emitted from the sample; and

an image processor for forming an image based on the particles detected by the detector, wherein[[::]] said image processor:

memorizes a plurality of two dimensional images ~~on formed at different focus points heights,~~

for each of a plurality of different image points, selects a pixel having a larger focus evaluation value than at least one other pixel from among pixels at same coordinates of the two dimensional images, and

forms the image by arranging the selected pixels for each of the plurality of different image points two dimensionally.

52. (Currently Amended) A charged particle beam apparatus comprising:

a charged particle source;

a scanning deflector for scanning a charged particle beam emitted from the charged particle source on a sample;

an objective lens for focusing the charged particle beam;

a detector for detecting particles emitted from the sample; and

a controller for adjusting the objective lens, wherein for:

said controller adjusting a charged particle beam to a focus and computing a focal depth for an image if taken at that focus; and

shifting focus of the charged particle beam by an amount equal to or less than the computed focal depth calculates a focal depth of the charged particle beam and determines a focus change amount based on the calculated focal depth when the focus of the charged particle beam is changed sequentially.

53. (Previously Presented) A charged particle apparatus as claimed in claim 52, wherein said controller calculates said focal depth based on image forming conditions.

54. (Previously Presented) A charged particle apparatus as claimed in claim 53, wherein said image forming conditions include magnification of the image, an acceleration voltage of the charged particle beam, beam resolution, and/or a number of pixels of the image.

55. (Currently Amended) A charged particle apparatus as claimed in claim 52, wherein said controller has an input device for inputting a number of images, and determines [[the]] a focus change shift amount based on said calculated focal depth and the number of images inputted.